

Board Administration and Regulatory Coordination Unit

Division 3. Air Resources Board

Chapter 3. Highway and Mandatory Inspection Emission Standards

Article 1. General Provisions

§ 2176. Mandatory Inspection Exhaust Emissions--Light-Duty and Medium-Duty Vehicles.

(a) Pursuant to Section 43010, Chapter 1, Part 5, Division 26 of the Health and Safety Code, exhaust emissions from light-duty (6,000 pounds or less gross vehicle weight) and medium-duty (8,500 pounds or less gross vehicle weight) gasoline-powered vehicles subject to inspection pursuant to Chapter 20.4 (commencing with Section 9889.50) of Division 3 of the Business and Professions Code shall not exceed the standards set forth in this section by vehicle class as shown in Table 1.

(b) The inspection shall consist of exhaust emission measurements from the vehicle with the air injection system (if any) connected. Hydrocarbon, carbon monoxide, and oxides of nitrogen concentrations shall be determined by non-dispersive infrared instrumentation.

The cruise mode test shall be performed first on a chassis dynamometer at the speeds and loads shown in the following table:

<i>Loading Class</i>	<i>Number of Cylinders</i>	<i>Vehicle Shipping Weight</i>	<i>Speed (mph)</i>	<i>Loading (Hp)</i>
1	4 or less	--	4 ± 1	10 ± 1
2	5 or 6	--	40 ± 1	15 ± 1.5
3	7 or more	less than 3,250 lbs.	40 ± 1	17.5 ± 1.5
4	7 or more	3,250 lbs. or more	40 ± 1	20 ± 1.5

A vehicle which cannot reach the speed and load specified in the table above, or which by its original design cannot be tested at cruise on an inspection center dynamometer, may be exempted from the cruise mode of the test. Vehicles owned by licensed fleet operators may be exempted from cruise mode test, provided an underhood functional inspection is performed on these vehicles, in addition to idle mode test. An idle mode test may be performed on vehicles at one lane inspection centers wherever dynamometers are inoperative.

The idle mode test shall be performed with the transmission set in neutral gear with the engine at its normal operating temperature. The cruise mode test shall be performed with automatic transmission in drive and with manual transmission set in high gear but overdrive will be disengaged.

(c) In the event of a conflict between the emission standards set forth in subdivision (a) and a manufacturer's specifications for a particular engine family or group of vehicles (defined by make, model year, and emission control system), as demonstrated by an excessive failure rate, by valid assembly-line data of the vehicle manufacturer, or by other data available to the executive officer, the executive officer may by Executive Order exempt such engine families or groups of vehicles from the standards set forth in subdivision (a) and set appropriate separate emission standards.

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Table 1
Two Mode MVIP Standards

Category Number	Model Year	Emission Control System	No. of Cylinders	Idle Standards*		40 MPH Cruise Standards*		
				HC PPM	CO %	HC PPM	CO %	Nox** PPM
1	1955–1965		5 or more	800	8.50	400	6.50	NO STD
2	1966–1970	with air injection	5 or more	450	5.00	350	4.00	2400
3	1966–1970	without air injection	5 or more	550	7.00	350	4.50	3000
4	1971–1972	with air injection	5 or more	300	4.00	200	2.00	2200
5	1971–1972	without air injection	5 or more	450	6.50	250	3.00	3200
6	1973–1974	with air injection	5 or more	200	3.50	150	2.00	1700
7	1973–1974	without air injection	5 or more	450	6.50	250	2.50	2600
8	1955–1967		4 or less	1200	8.00	400	6.50	NO STD
9	1968–1970	with air injection	4 or less	400	5.50	300	4.50	3200
10	1968–1970	without air injection	4 or less	900	7.50	300	6.00	3000
11	1971–1972	with air injection	4 or less	400	5.50	300	4.00	3000
12	1971–1972	without air injection	4 or less	400	6.50	300	5.00	3400
13	1973–1974	with air injection	4 or less	300	4.50	250	4.00	1700
14	1973–1974	without air injection	4 or less	350	6.50	250	4.00	2600
15	1975 +	no catalyst	ALL	150	3.00	150	1.50	2100
16	1975 +	catalyst without air injection	ALL	200	4.00	150	1.50	2200
17	1975 +	catalyst with air injection	ALL	100	1.00	100	1.00	1500
18	1975 +	three – way catalyst	ALL	80	1.00	80	1.00	1000

*HC (ppm) is defined as hydrocarbons in parts per million of hexane by volume, CO (%) is defined as carbon monoxide in percent by volume, and NOx (ppm) is defined as oxides of nitrogen in parts per million in nitric oxide by volume.

NOTE: Authority cited: Sections 39600, 39601 and 43010, Health and Safety Code; and Sections 9889.50 and 9889.51, Business and Professions Code. Reference: Sections 39002, 39003, 39500, 43000, 43013 and 43600, Health and Safety Code; and Section 9889.50, Business and Professions Code.

REFERENCE